



Low Temperature VwART Calculation for Switch2 Energy Ltd. HIU

Primary flow temperature = 60°C, DHW set point = 50°C, Space heating temperatures = 35°C/45°C

Test carried out by BSRIA Ltd. in September 2019, Test Reference 61535/1

Manufacturer: Switch2 Energy Ltd.; Model: T3 ECO PLUS; Serial number: S2HIU19001065; Year of manufacture: 2019

VwART calculation prepared by Colin Judd of BSRIA Ltd. on 19 September 2019

	VwART (°C)	Volume (m ³)
DHW	18	30.5
Keep warm	44	53.9
Space heating	35	51.0

VwART with keep warm active		
Period	VwART (°C)	% Time
No heating	34	93%
Heating	35	7%
Overall	35	

	DHW draw test results			Post DHW draw (60 seconds)	
	Power (W)	Primary flow (m ³ /hr)	Return temp (°C)	Primary flow (m ³ /hr)	Return temp (°C)
Low	9734	0.194	17.4	0.002	17.85
Medium	16299	0.346	19.2	0.003	19.01
High	21297	0.451	19.5	0.005	19.79

DHW draw volumes per annum		
Energy (kWh)	Time (hours)	Volume (m ³)
729	74.89	14.564
297	18.22	6.311
444	20.85	9.397

Post DHW draw volumes per annum		
Events	Avg duration (seconds)	Volume (m ³)
10000	30	0.170
660	75	0.044
300	145	0.062

Keep warm test results	
Primary flow (m ³ /hr)	Return temp (°C)
0.0067	43.5

Keep warm volumes per annum	
Time (hours)	Volume (m ³)
8029	53.936

	Space heating test results		
	Power (W)	Primary flow (m ³ /hr)	Return temp (°C)
1 kW	1053	0.037	35.2
2 kW	2065	0.072	35.1
4 kW	3959	0.140	35.3

Space heating volumes per annum		
Energy (kWh)	Time (hours)	Volume (m ³)
98	93.03	3.476
787	381.17	27.444
565	142.70	20.035